

~~Sub A~~
B1

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~~Sub A2~~
B2

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Sub E 17

9. Apparatus as claimed in Claim 7, wherein said liquid acts as an infra red filter

Sub A3

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in regions where blood is a target of said light output.

13. Apparatus for producing a pulse of light, comprising: a
5 light source operable to provide an output of light in
response to a power input, and a power supply connected
to the light source for providing said power input,
wherein said power supply is operable to provide a
10 power output pulse or pulse train to drive said light
source to produce said light output pulse or pulse
train, during which light output pulse or pulse train
for at least 80% of the light output period (i.e. the
duration of a single pulse or the aggregate of the
duration of the pulses within a pulse train excluding
15 intervals between pulses) the light power output is
from 75 to 125% of the time-weighted average light
power output during the light output period.
14. Apparatus as claimed in Claim 13, wherein for at least
20 90% of the light output period the light power output
is from 75 to 125% of the time-weighted average light
power output during the light output period.
15. Apparatus as claimed in Claim 13, wherein means is
25 provided for adjusting said time-weighted average light
power output.
16. Apparatus as claimed in Claim 13, further comprising a
housing for said light source, an aperture defined by
30 said housing and a reflector in said housing positioned
to reflect a beam of light through said aperture.
17. Apparatus as claimed in Claim 13, further comprising an
optical filter in the path of said light beam, said

~~optical~~ filter being adapted to pass only selected wavelengths of said light.

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18. Apparatus for photo-treatment comprising a light source, means for receiving a filter adapted to pass only selected wavelengths of light so as to dispose said filter in a light path from said light source, sensor means for detecting the presence and nature of a said filter in said filter receiving means, and interlock means for preventing operation of said light source to carry out photo-treatment except when a said filter appropriate to an intended photo-treatment is present in said receiving means and/or for providing an alarm signal if a said appropriate filter is not present in said receiving means.

19. Apparatus for photo-treatment comprising a light source, a filter adapted to pass only selected wavelengths of light disposed in a light path from said light source, said light source being adapted to produce a light flux of at least $250 \text{ J/cm}^2/\text{sec}$, wherein said filter is a non-interference absorption filter.

20. Apparatus as claimed in Claim 19, further comprising means for circulating a cooling liquid in contact with said light source.

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21. Apparatus as claimed in Claim 20, further comprising a filter adapted to pass only selected wavelengths of light disposed in said light path from said light source and also in contact with said cooling liquid.

22. Apparatus as claimed in claim 1, wherein the light source comprises a gas-filled arc lamp.

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23. Apparatus as claimed in Claim 22, wherein said gas-filled arc lamp is a xenon or krypton lamp.

24. Apparatus as claimed in claim 1, wherein the power supply comprises a capacitor, a charging circuit adapted for charging the capacitor to a preselected voltage, a resistor in series between said capacitor and said light source and a discharge switch operable to change from a non-conductive state to a conductive state to cause said capacitor to discharge said light source and back to said non-conductive state again.

25. Apparatus according to Claim 24, wherein the light source is an arc lamp and the power supply comprises a simmer generator adapted for feeding the arc lamp with power at a level which is sufficient to keep the arc in the conductive state.

26. Apparatus as claimed in claim 1, wherein there is means for focussing the light output to concentrate the same at a selected depth below the surface of the treatment location.

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Add C3
Add D2

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